

Fig. 1A

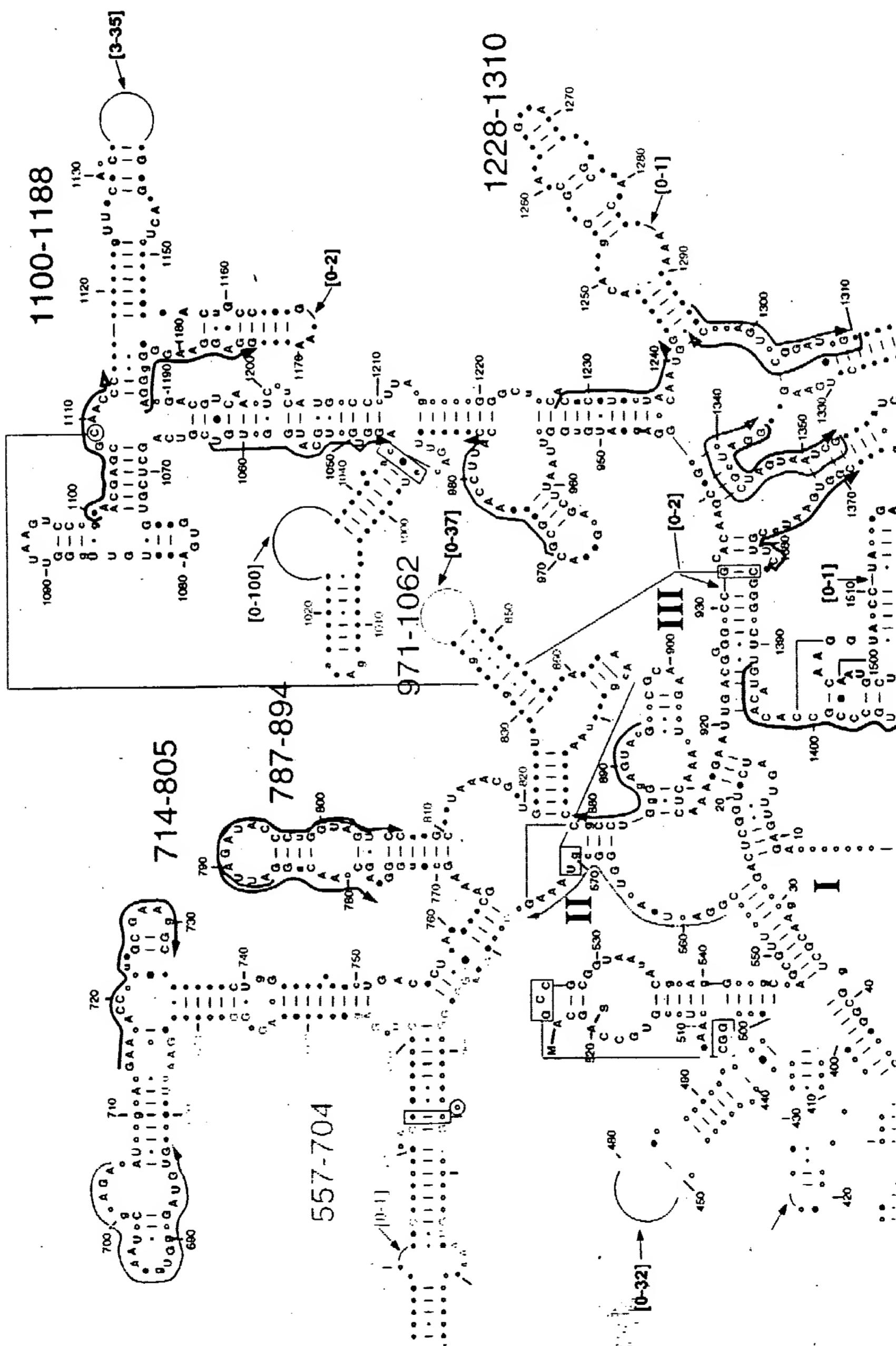
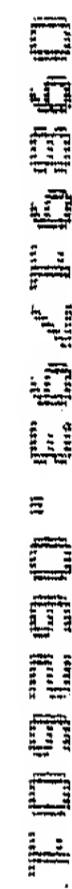


Fig. 1B

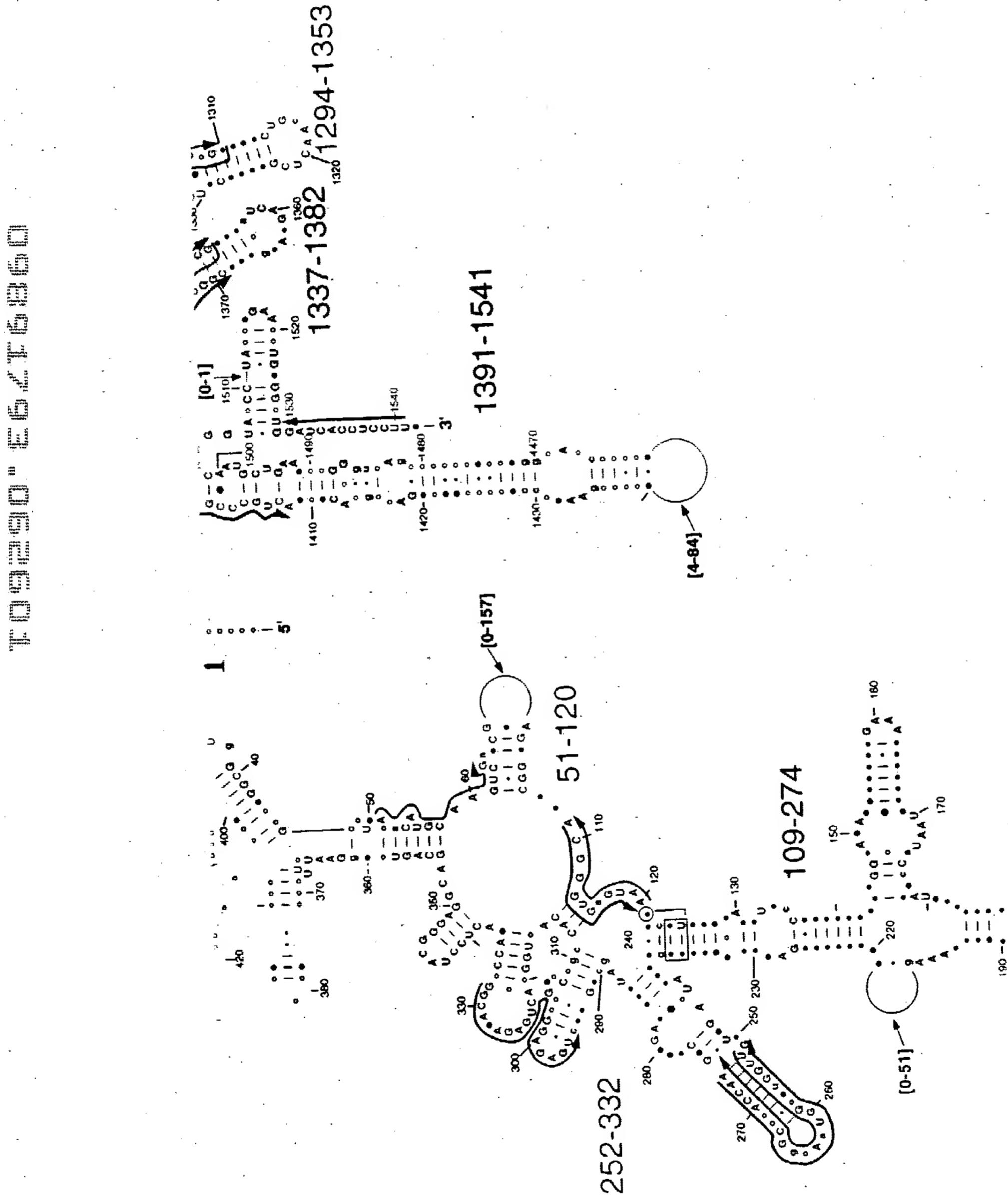
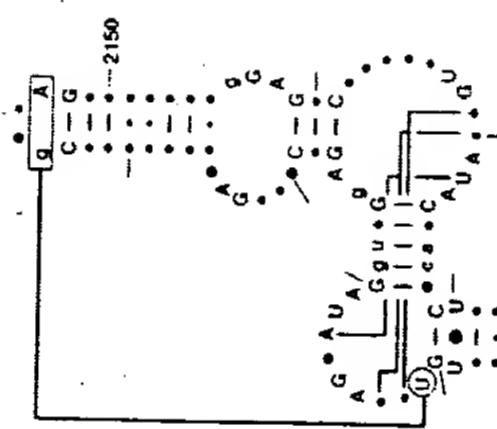


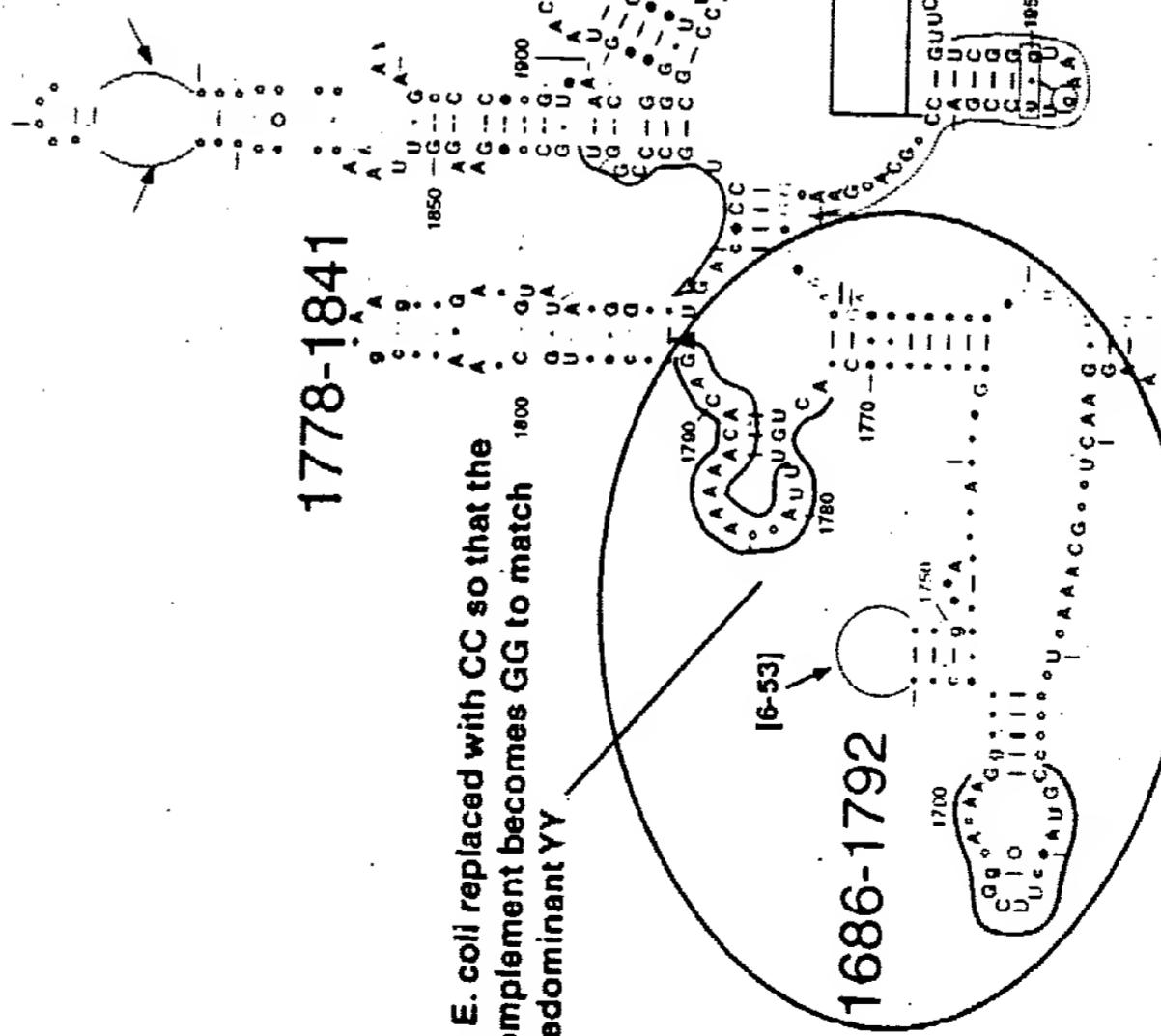
Fig. 1C

1778-1841

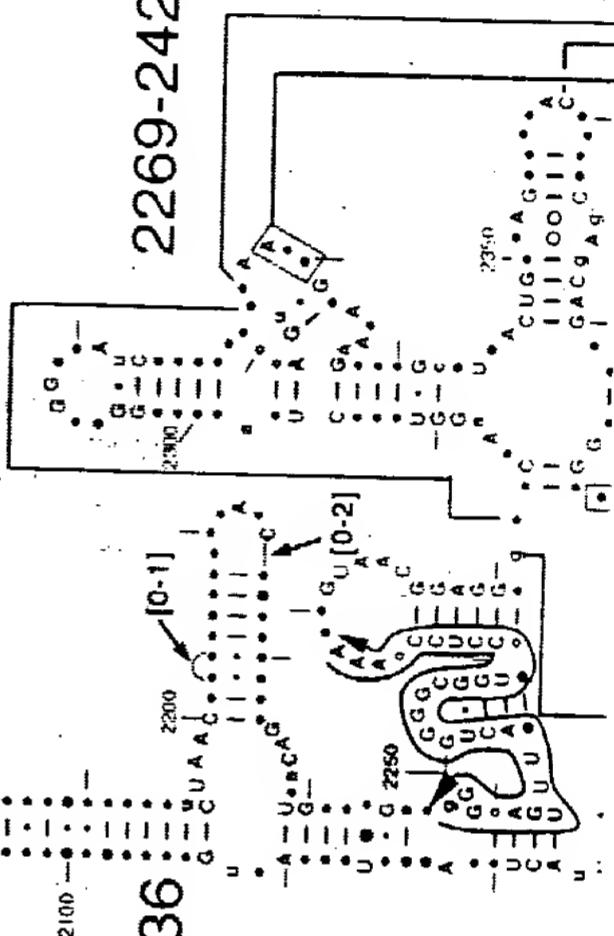


1778-1841

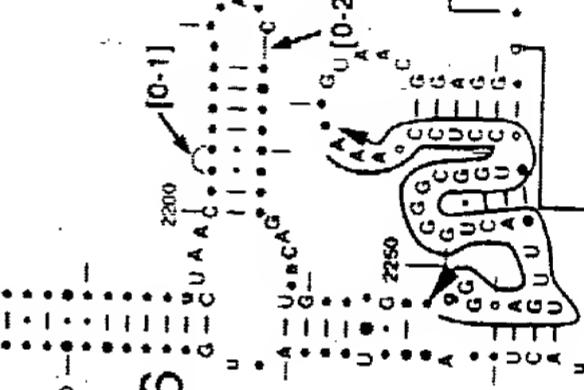
Note: TA in E. coli replaced with CC so that the reverse complement becomes GG to match with the predominant YY



2269-2422



2075-2236



1946-2075

IV

Docket No.: 1208-0368  
Title: A SUMMARY STRUCTURE DEFINING DATABASE AND METHODS FOR DETERMINING  
IDENTITY AND GEOGRAPHIC ORIGIN OF AN UNKNOWN BIOAGENT THEREBY  
Inventors: David J. Ecker, Richard Griffey, Rangarajan Sampath, Steven Hofstadler, John M. Moore, Stanley T. Crooke

Atty: Paul K. Legaard - Telephone: 215 568 3100

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1946-2075

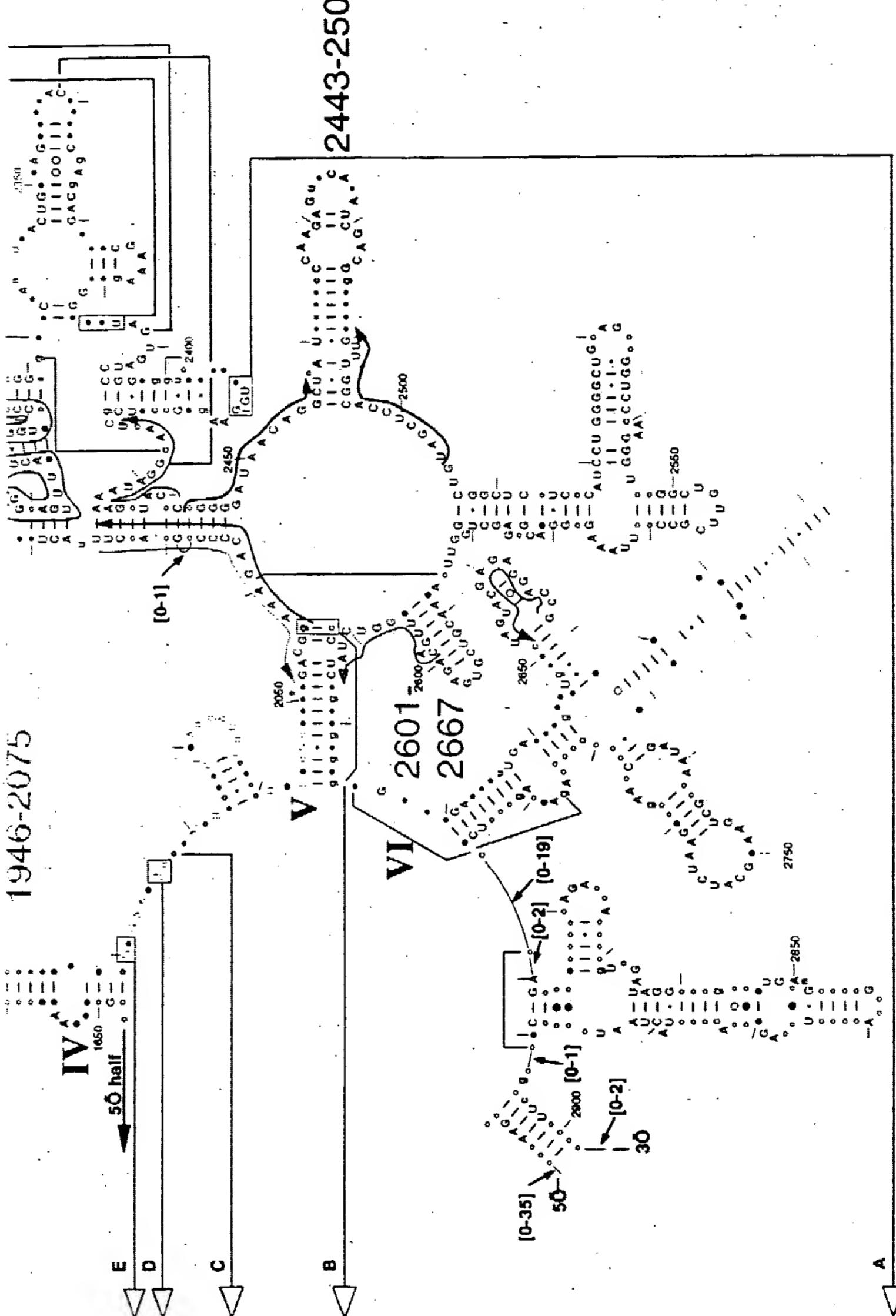
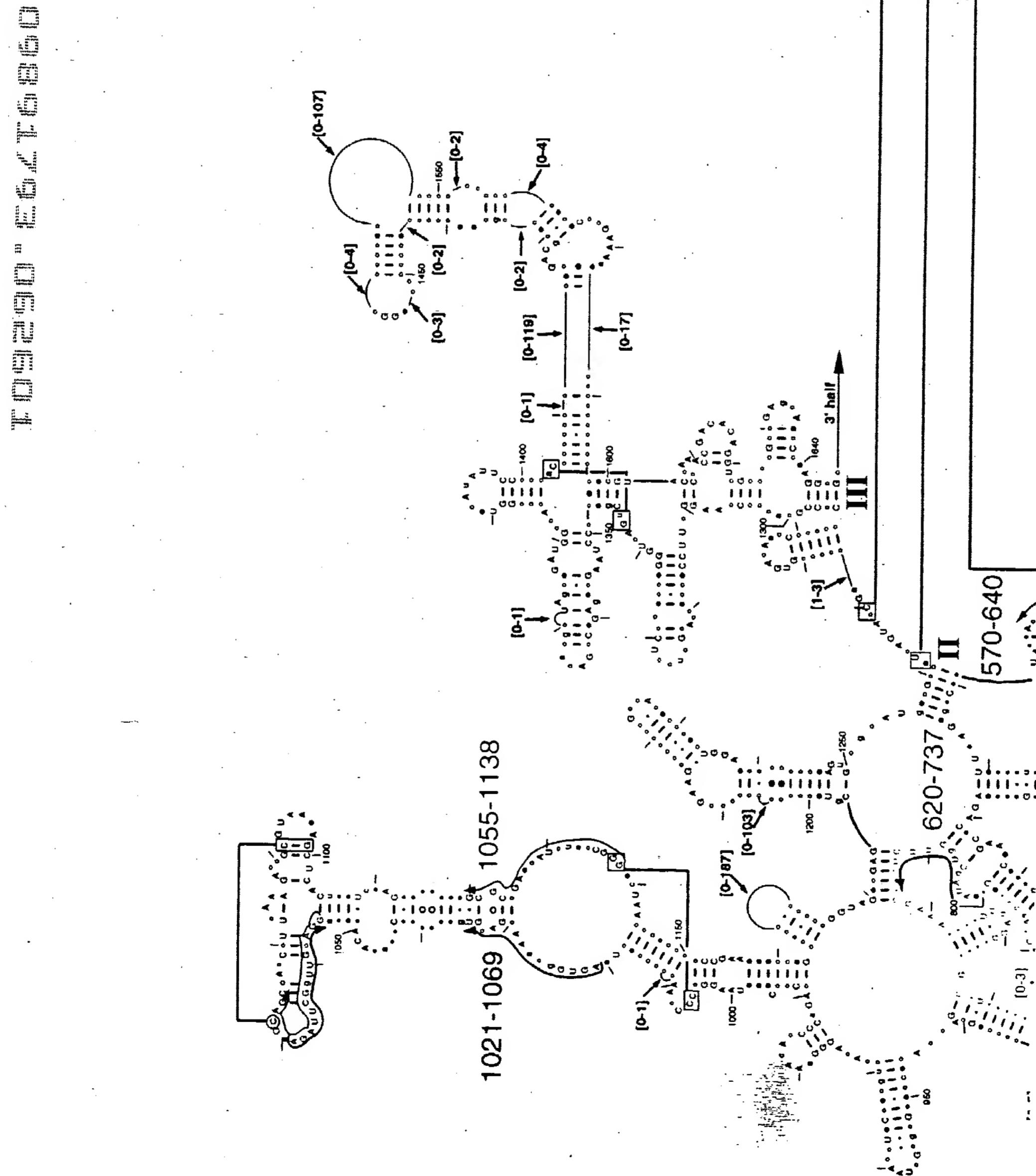


Fig. 1D

Fig. 1E



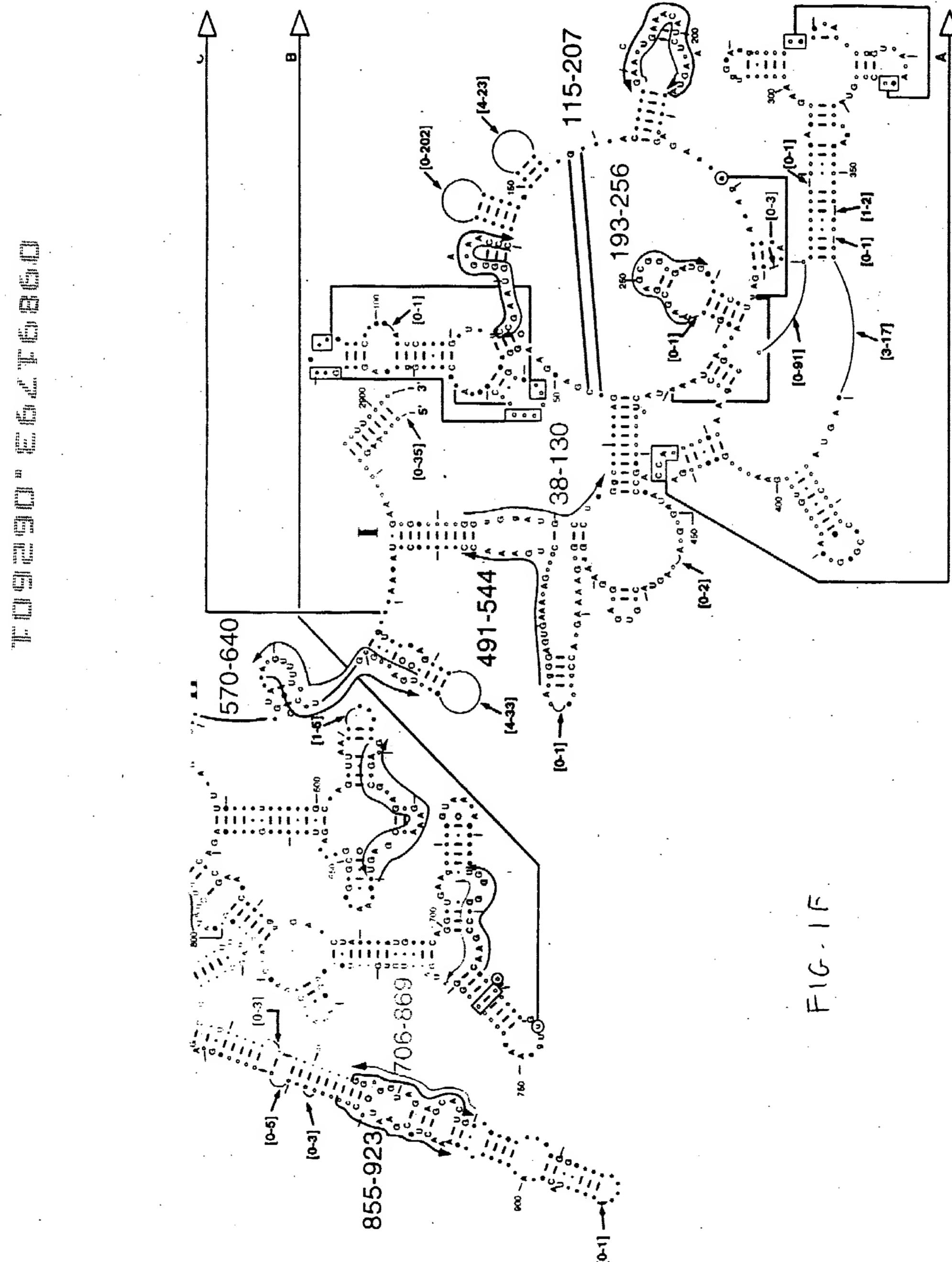


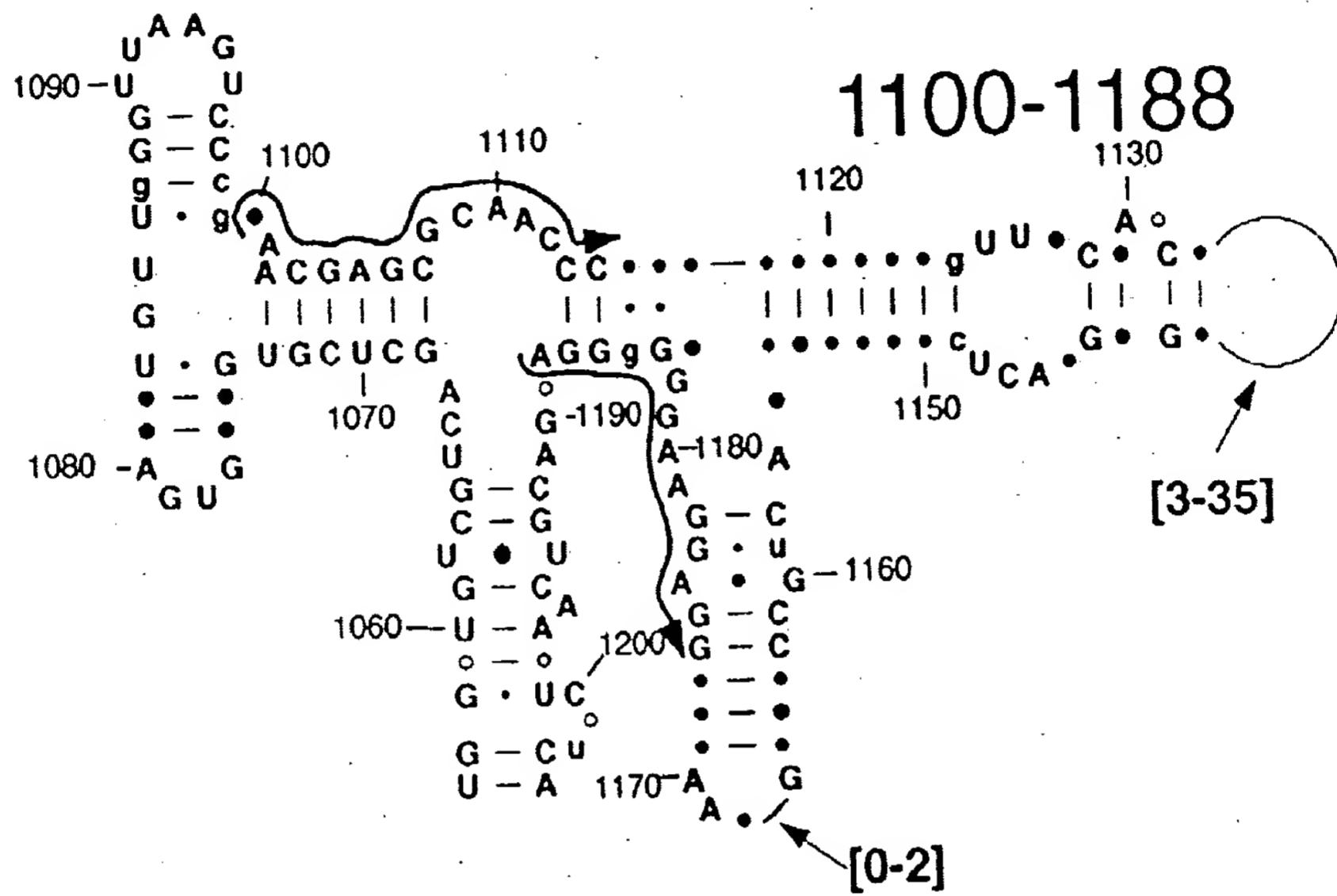
FIG. 1F

FIG. 1G

100-220 240-260 280-300 320-340 360-380 400-420 440-460 480-500 520-540 560-580 600-620 640-660 680-700 720-740 760-780 800-820 840-860 880-900 920-940 960-980 1000-1020 1040-1060 1080-1100 1120-1140 1160-1180 1200-1220 1240-1260 1280-1300 1320-1340 1360-1380 1400-1420 1440-1460 1480-1500 1520-1540 1560-1580 1600-1620 1640-1660 1680-1700 1720-1740 1760-1780 1800-1820 1840-1860 1880-1900 1920-1940 1960-1980 1980-2000 2020-2040 2040-2060 2060-2080 2080-2100 2100-2120 2120-2140 2140-2160 2160-2180 2180-2200 2200-2220 2220-2240 2240-2260 2260-2280 2280-2300 2300-2320 2320-2340 2340-2360 2360-2380 2380-2400 2400-2420 2420-2440 2440-2460 2460-2480 2480-2500 2500-2520 2520-2540 2540-2560 2560-2580 2580-2600 2600-2620 2620-2640 2640-2660 2660-2680 2680-2700 2700-2720 2720-2740 2740-2760 2760-2780 2780-2800 2800-2820 2820-2840 2840-2860 2860-2880 2880-2900 2900-2920 2920-2940 2940-2960 2960-2980 2980-3000 3000-3020 3020-3040 3040-3060 3060-3080 3080-3100 3100-3120 3120-3140 3140-3160 3160-3180 3180-3200 3200-3220 3220-3240 3240-3260 3260-3280 3280-3300 3300-3320 3320-3340 3340-3360 3360-3380 3380-3400 3400-3420 3420-3440 3440-3460 3460-3480 3480-3500 3500-3520 3520-3540 3540-3560 3560-3580 3580-3600 3600-3620 3620-3640 3640-3660 3660-3680 3680-3700 3700-3720 3720-3740 3740-3760 3760-3780 3780-3800 3800-3820 3820-3840 3840-3860 3860-3880 3880-3900 3900-3920 3920-3940 3940-3960 3960-3980 3980-4000 4000-4020 4020-4040 4040-4060 4060-4080 4080-4100 4100-4120 4120-4140 4140-4160 4160-4180 4180-4200 4200-4220 4220-4240 4240-4260 4260-4280 4280-4300 4300-4320 4320-4340 4340-4360 4360-4380 4380-4400 4400-4420 4420-4440 4440-4460 4460-4480 4480-4500 4500-4520 4520-4540 4540-4560 4560-4580 4580-4600 4600-4620 4620-4640 4640-4660 4660-4680 4680-4700 4700-4720 4720-4740 4740-4760 4760-4780 4780-4800 4800-4820 4820-4840 4840-4860 4860-4880 4880-4900 4900-4920 4920-4940 4940-4960 4960-4980 4980-5000 5000-5020 5020-5040 5040-5060 5060-5080 5080-5100 5100-5120 5120-5140 5140-5160 5160-5180 5180-5200 5200-5220 5220-5240 5240-5260 5260-5280 5280-5300 5300-5320 5320-5340 5340-5360 5360-5380 5380-5400 5400-5420 5420-5440 5440-5460 5460-5480 5480-5500 5500-5520 5520-5540 5540-5560 5560-5580 5580-5600 5600-5620 5620-5640 5640-5660 5660-5680 5680-5700 5700-5720 5720-5740 5740-5760 5760-5780 5780-5800 5800-5820 5820-5840 5840-5860 5860-5880 5880-5900 5900-5920 5920-5940 5940-5960 5960-5980 5980-6000 6000-6020 6020-6040 6040-6060 6060-6080 6080-6100 6100-6120 6120-6140 6140-6160 6160-6180 6180-6200 6200-6220 6220-6240 6240-6260 6260-6280 6280-6300 6300-6320 6320-6340 6340-6360 6360-6380 6380-6400 6400-6420 6420-6440 6440-6460 6460-6480 6480-6500 6500-6520 6520-6540 6540-6560 6560-6580 6580-6600 6600-6620 6620-6640 6640-6660 6660-6680 6680-6700 6700-6720 6720-6740 6740-6760 6760-6780 6780-6800 6800-6820 6820-6840 6840-6860 6860-6880 6880-6900 6900-6920 6920-6940 6940-6960 6960-6980 6980-7000 7000-7020 7020-7040 7040-7060 7060-7080 7080-7100 7100-7120 7120-7140 7140-7160 7160-7180 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14300-14320 14320-14340 14340-14360 14360-14380 14380-14400 14400-14420 14420-14440 14440-14460 14460-14480 14480-14500 14500-14520 14520-14540 14540-14560 14560-14580 14580-14600 14600-14620 14620-14640 14640-14660 14660-14680 14680-14700 14700-14720 14720-14740 14740-14760 14760-14780 14780-14800 14800-14820 14820-14840 14840-14860 14860-14880 14880-14900 14900-14920 14920-14940 14940-14960 14960-14980 14980-15000 15000-15020 15020-15040 15040-15060 15060-15080 15080-15100 15100-15120 15120-15140 15140-15160 15160

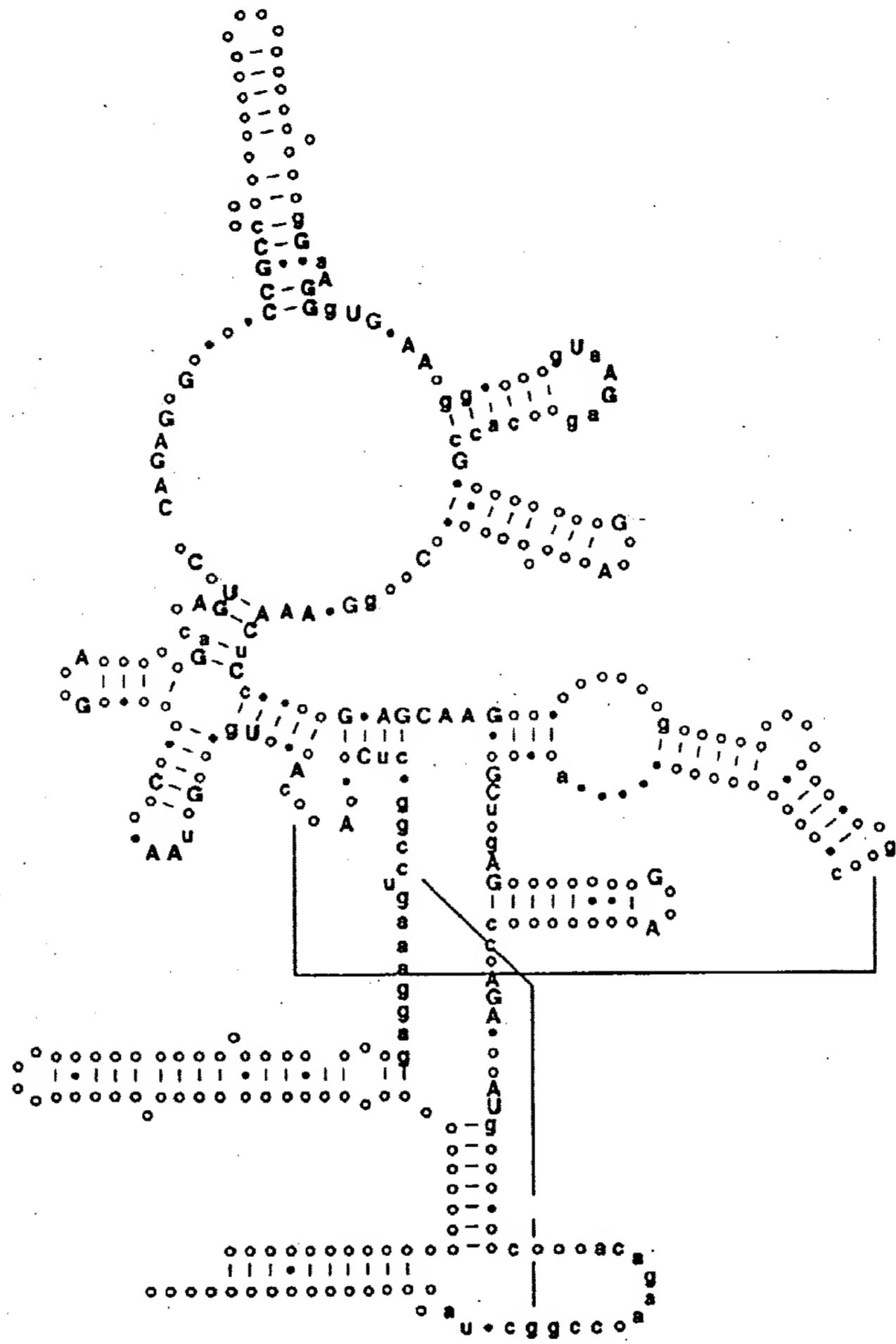
FIG. 2

100-1000 200-2000 300-3000



16S rRNA Domain III

FIG. 3



10 9 8 7 6 5 4 3 2 1

Tag

mass( $T^*T$ ) = X

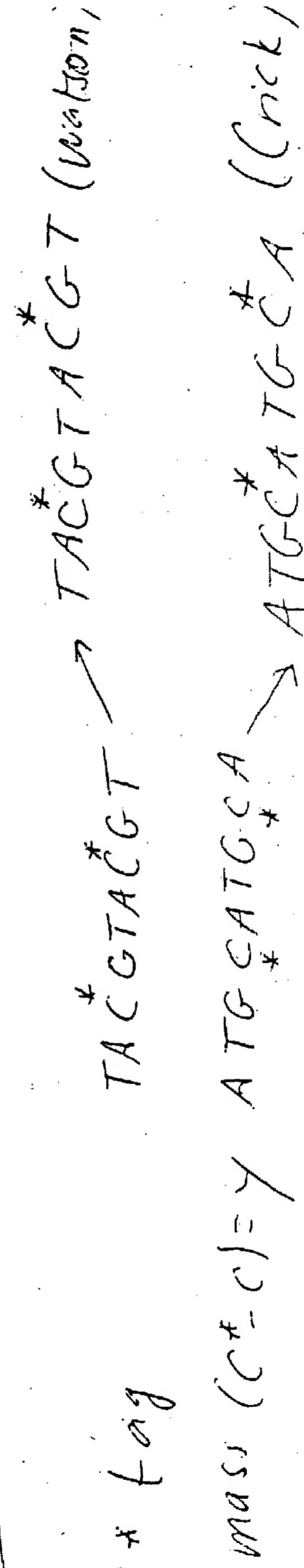
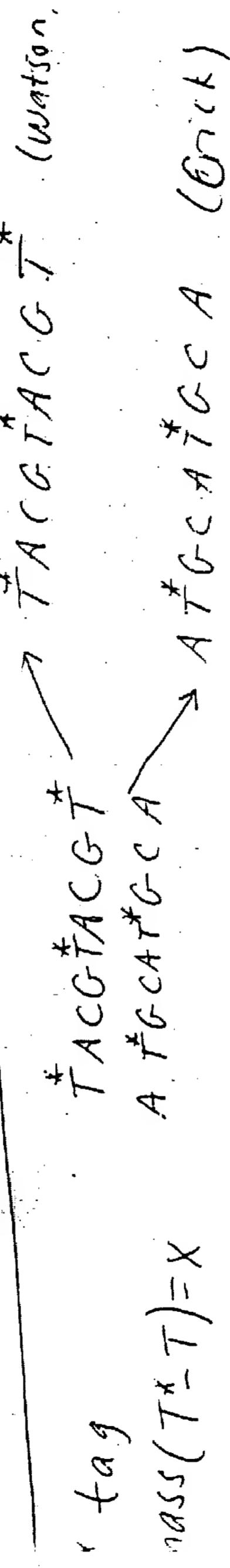


FIG. 4

# FIG. 5

*B. anthracis* ( $A_{14}G_9C_{14}T_9$ ) MW<sub>meas</sub> = 14072.2)

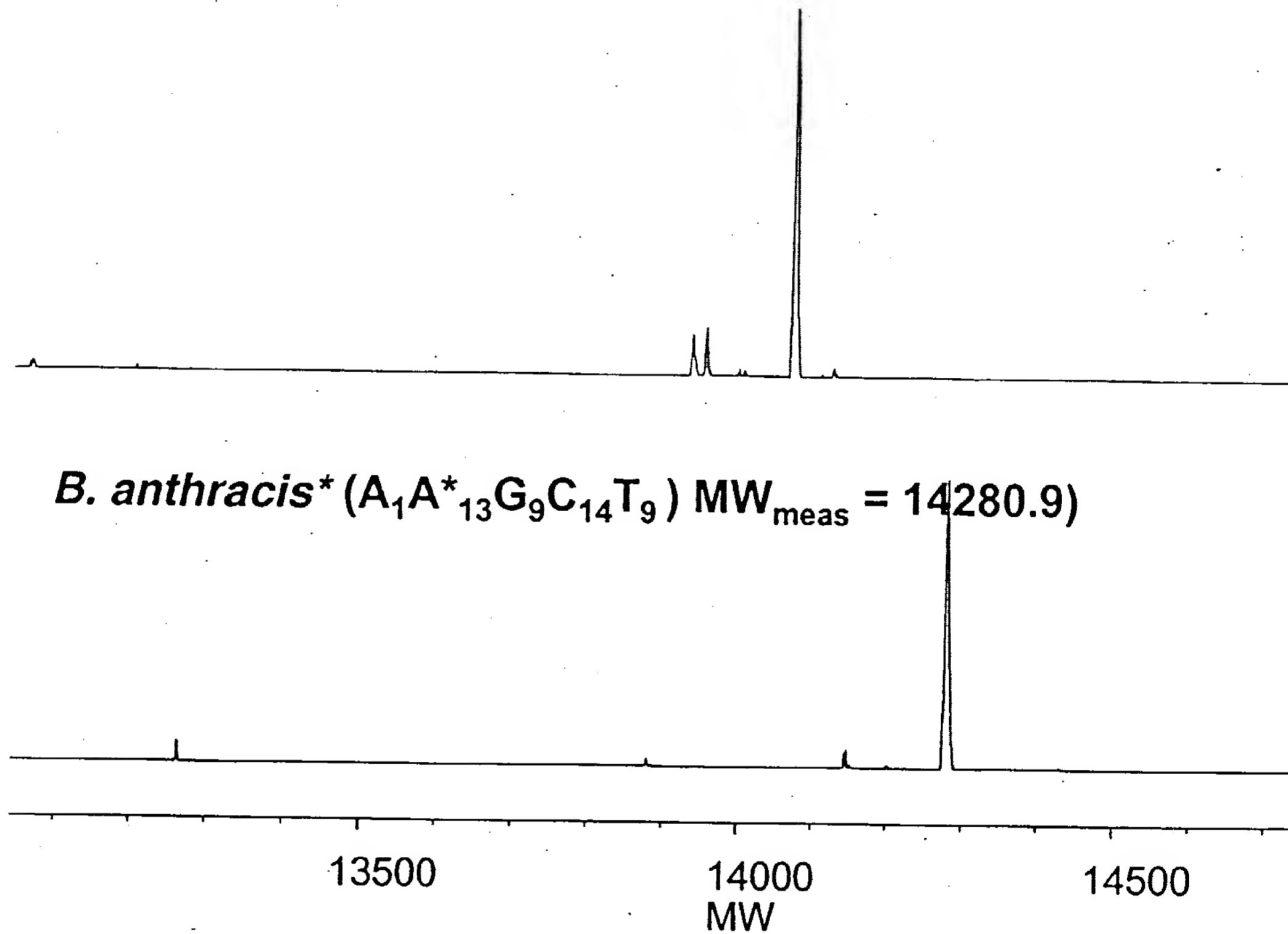
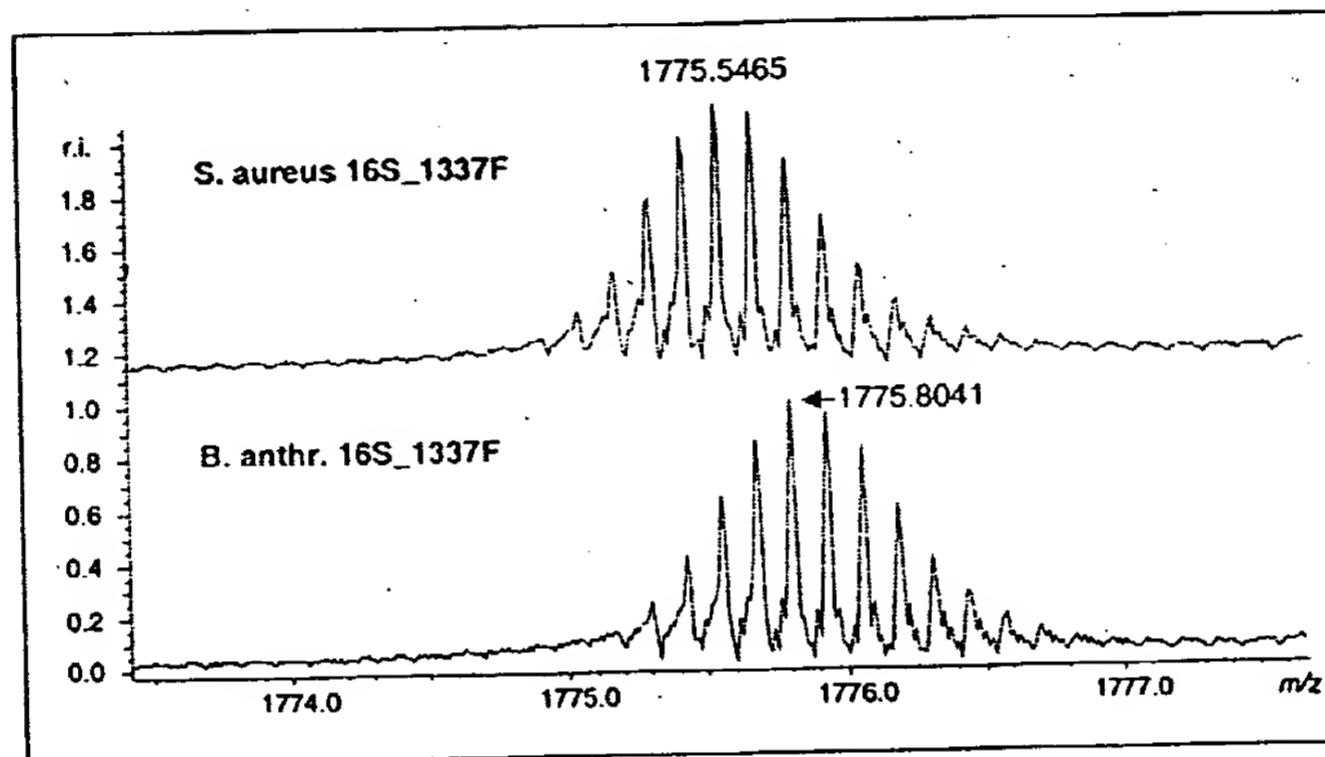
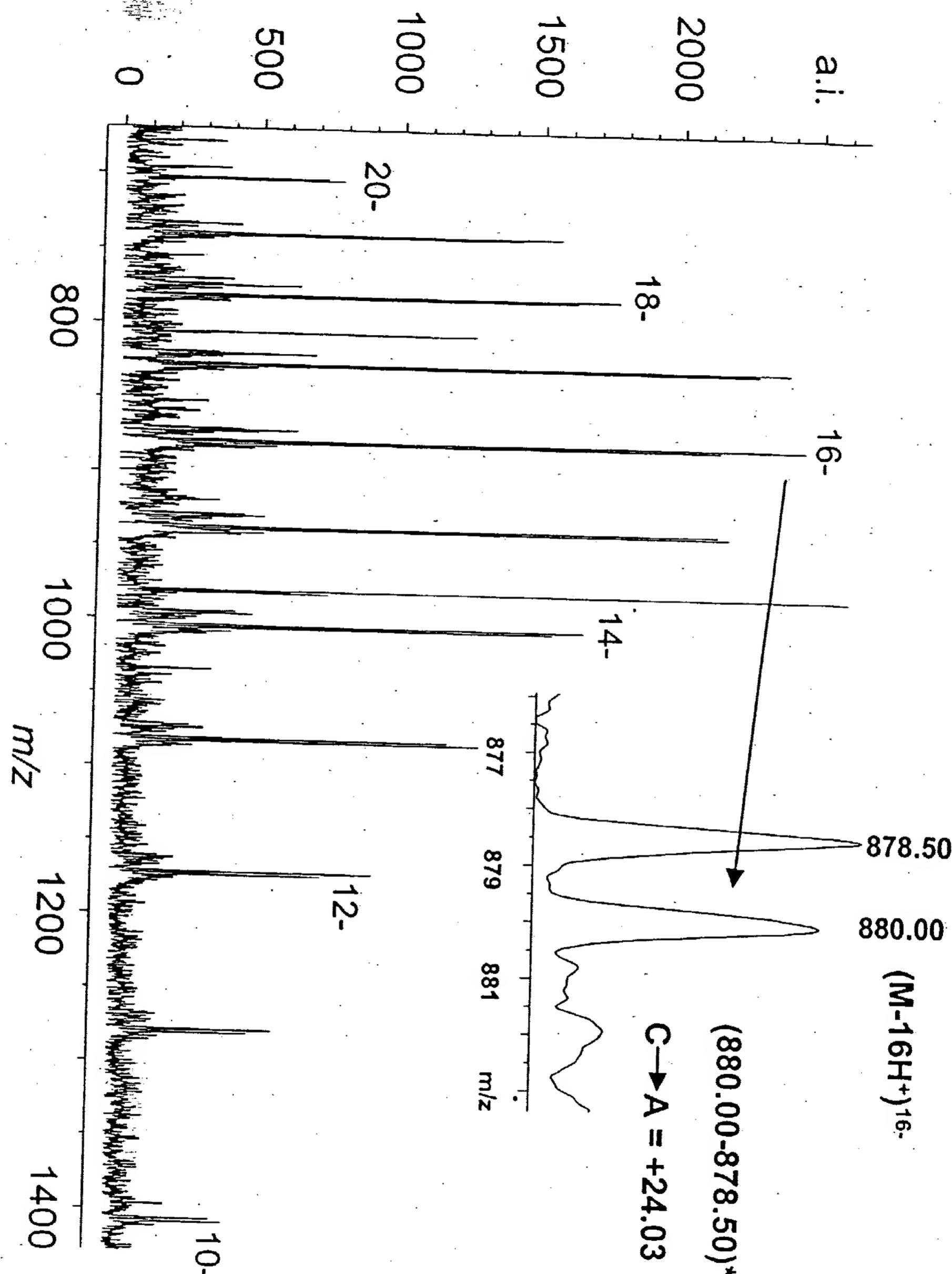


FIG. 6



0 6 9 3 2 2 0 6 2 6 0 3

FIG. 7



F D E I G S O " E G A C T E B E D

### ESI-TOF MS of sspE 56mer + Calibrant

| Z  | <u>M<sub>calc</sub></u> | <u>M<sub>meas</sub></u> |
|----|-------------------------|-------------------------|
| 20 | 862.035                 | 862.040                 |
| 18 | 957.935                 | 957.924                 |
| 16 | 1077.808                | 1077.796                |
| 14 | 1231.918                | 1231.911                |

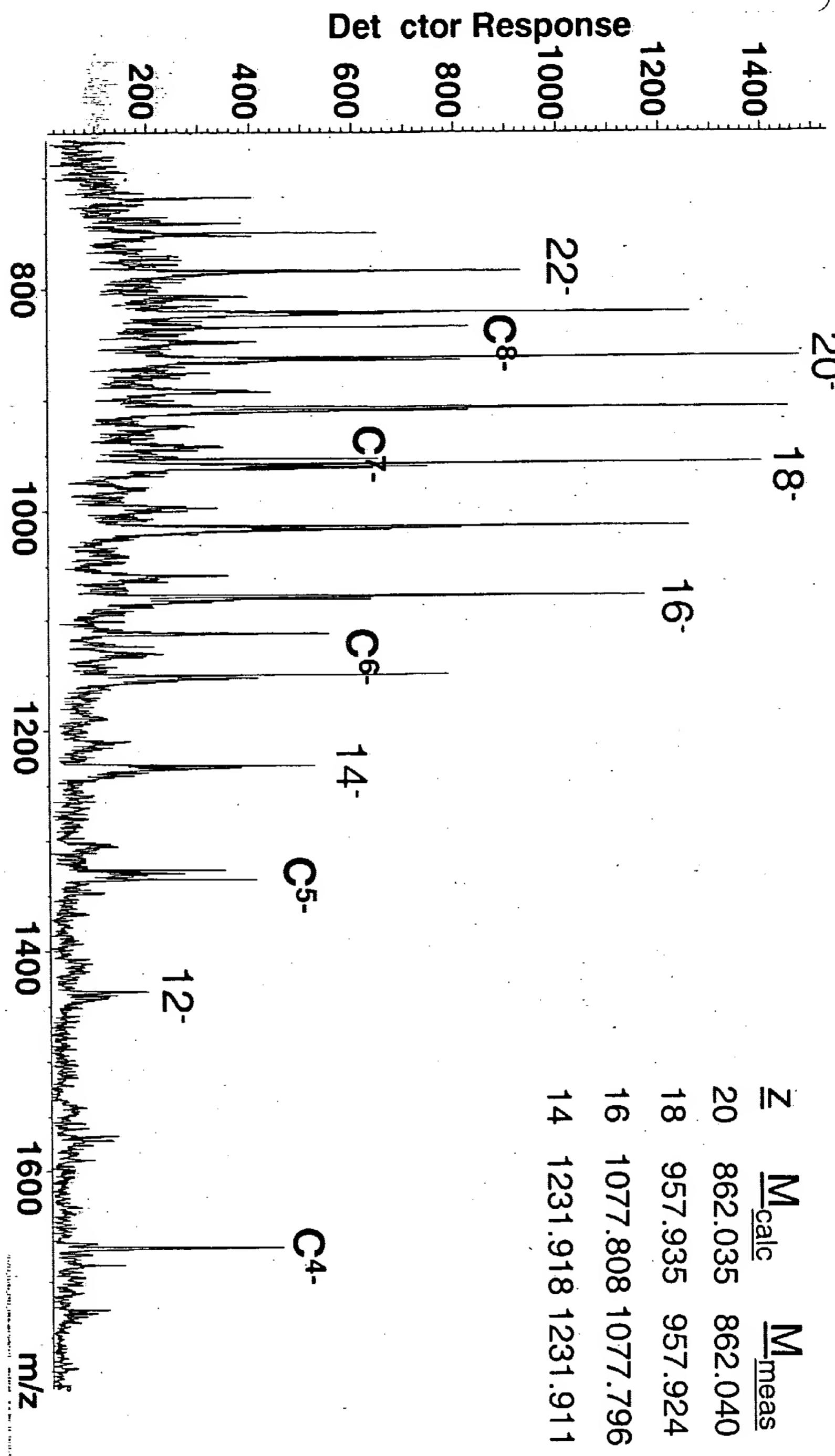


FIG. 8

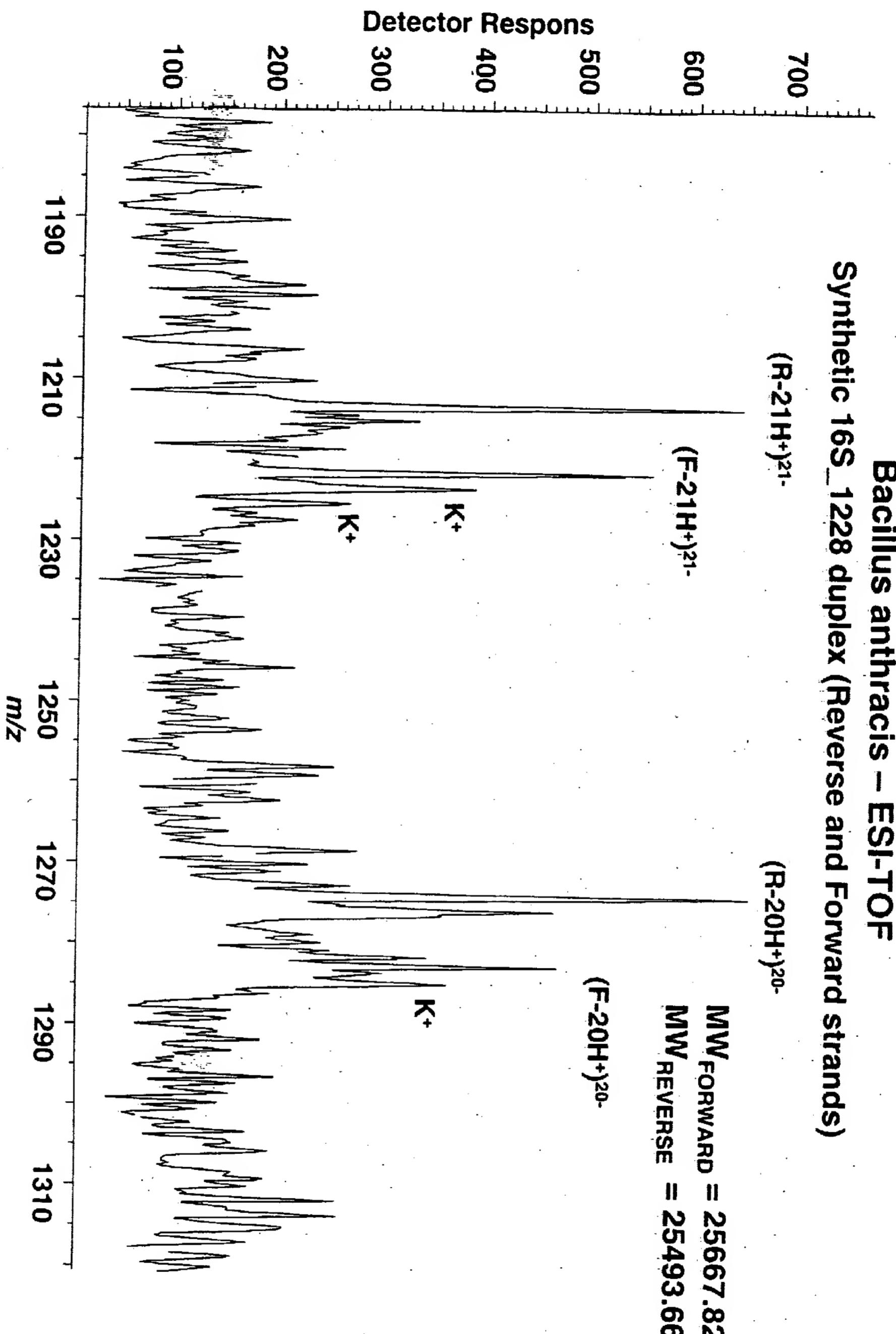


FIG. 9

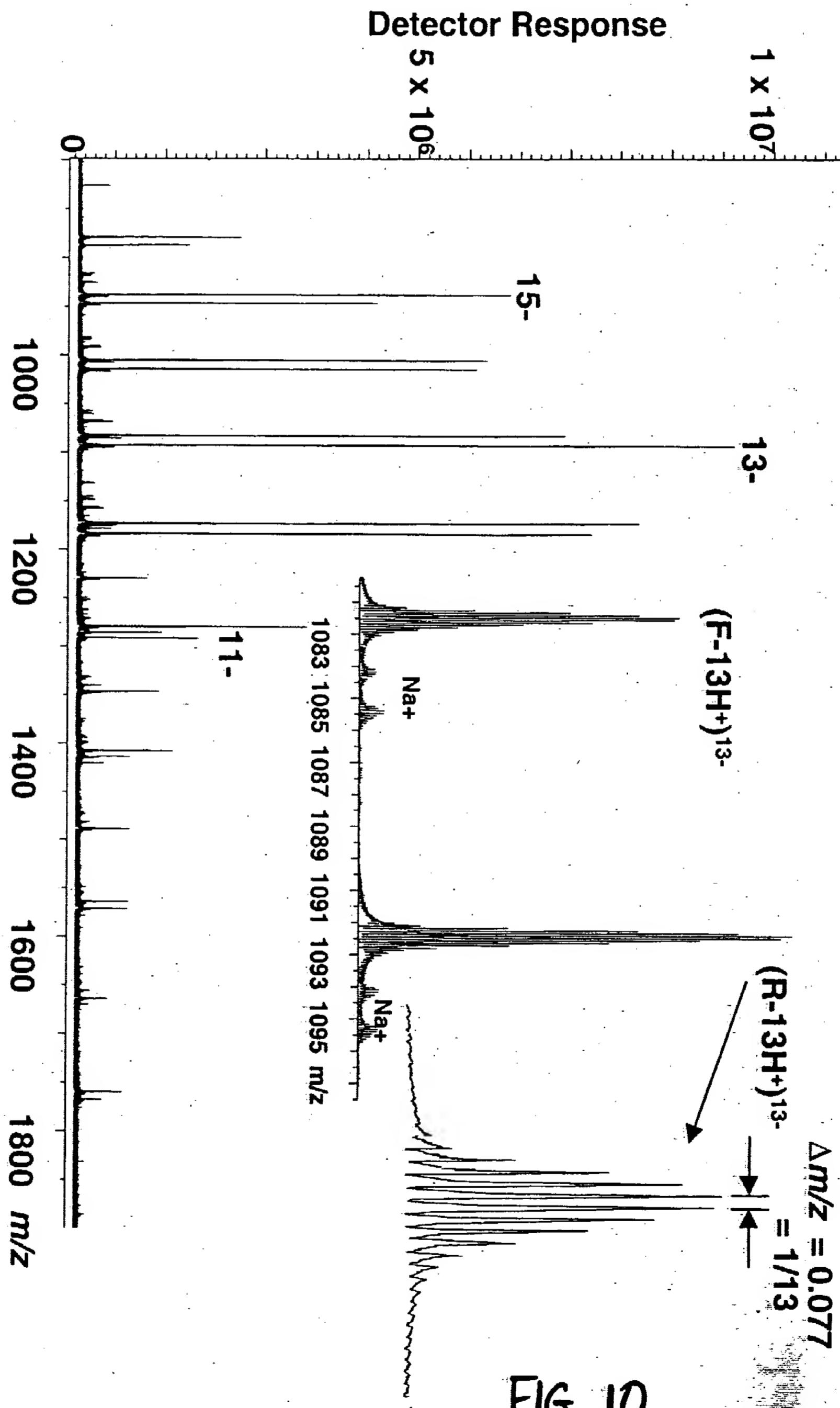


FIG. 10

T O S I A S I O - E G L T C I G I D

# ESI-FTICR-MS of Synthetic Bacillus anthracis 16S\_1337 46 bp duplex

ESI-TOF-MS of 56-mer BAsb Oligonucleotide  
With internal mass standard  
ESI at 1.7  $\mu$ L/min 5  $\mu$ M solution

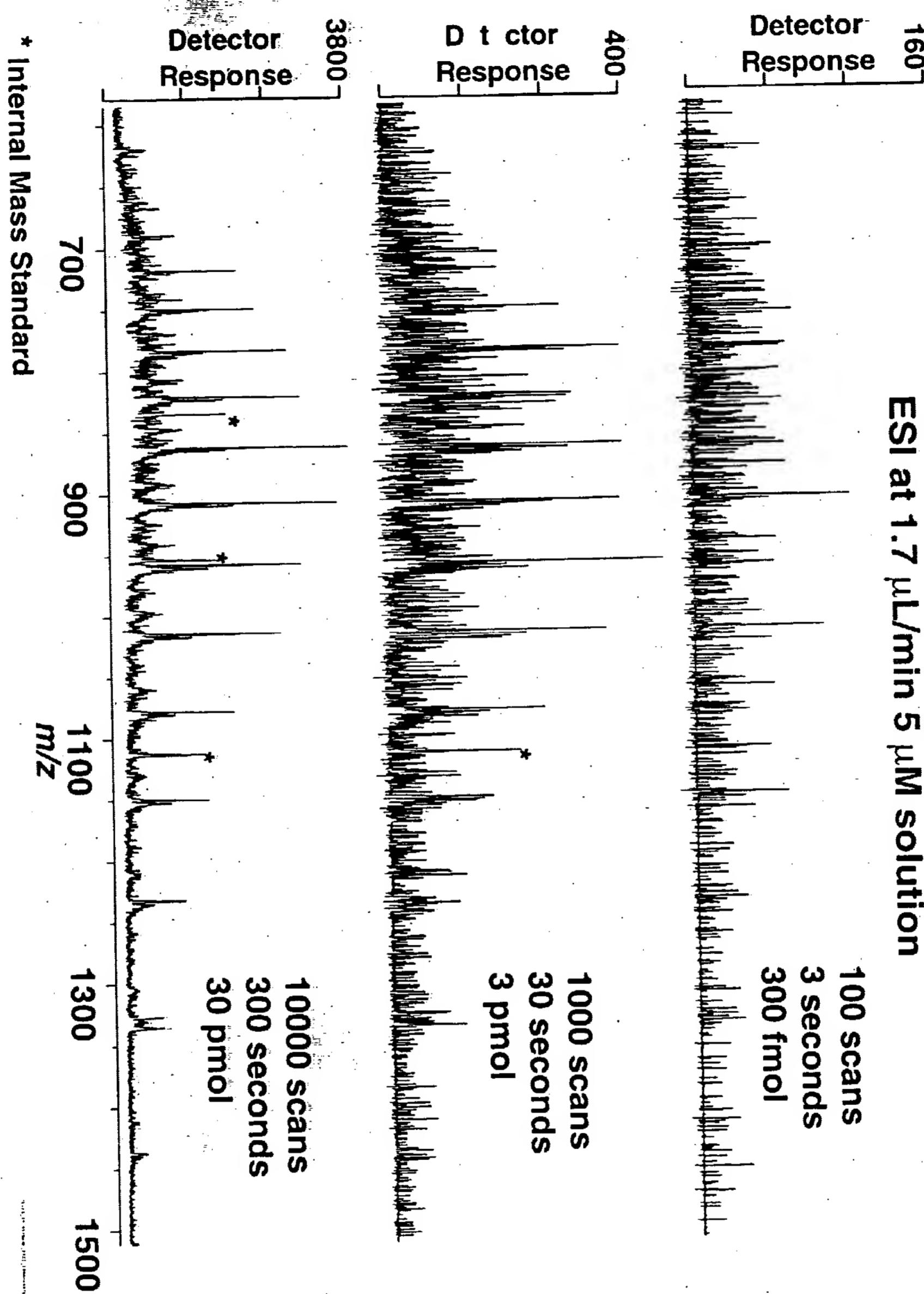


FIG. II

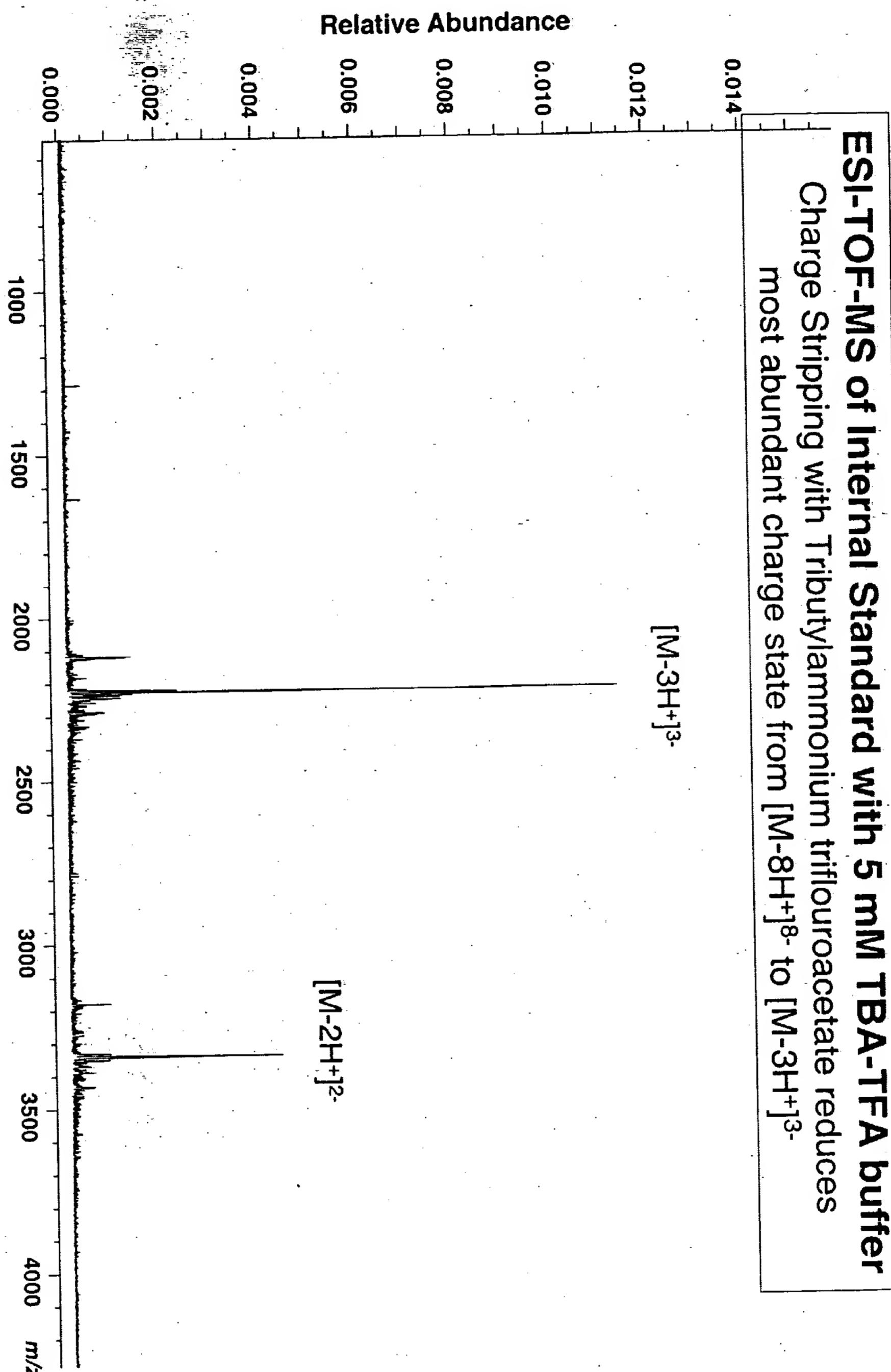


FIG. 12

Figure 13

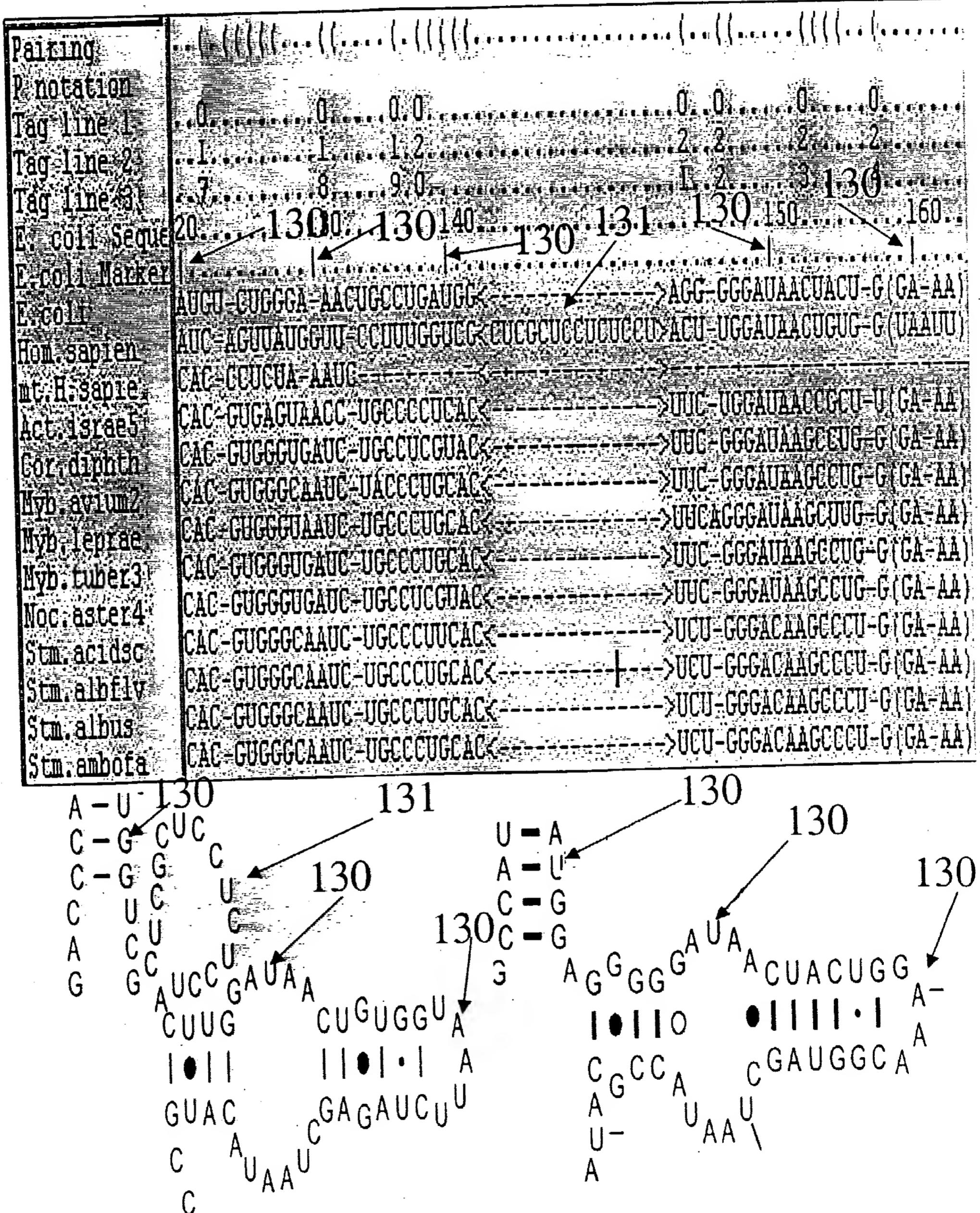


Figure 14

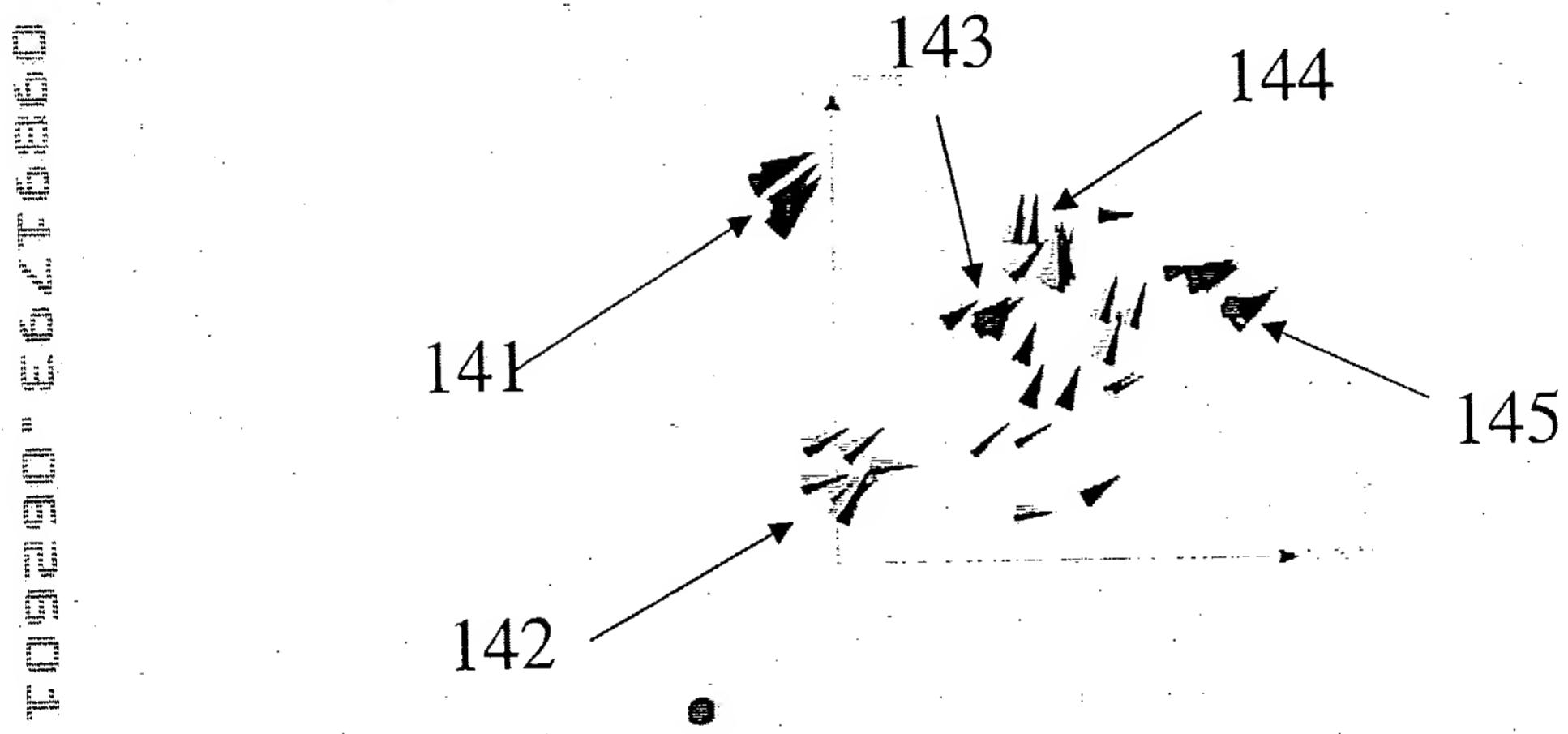


Figure 15

100 90 80 70 60 50 40 30 20 10 0

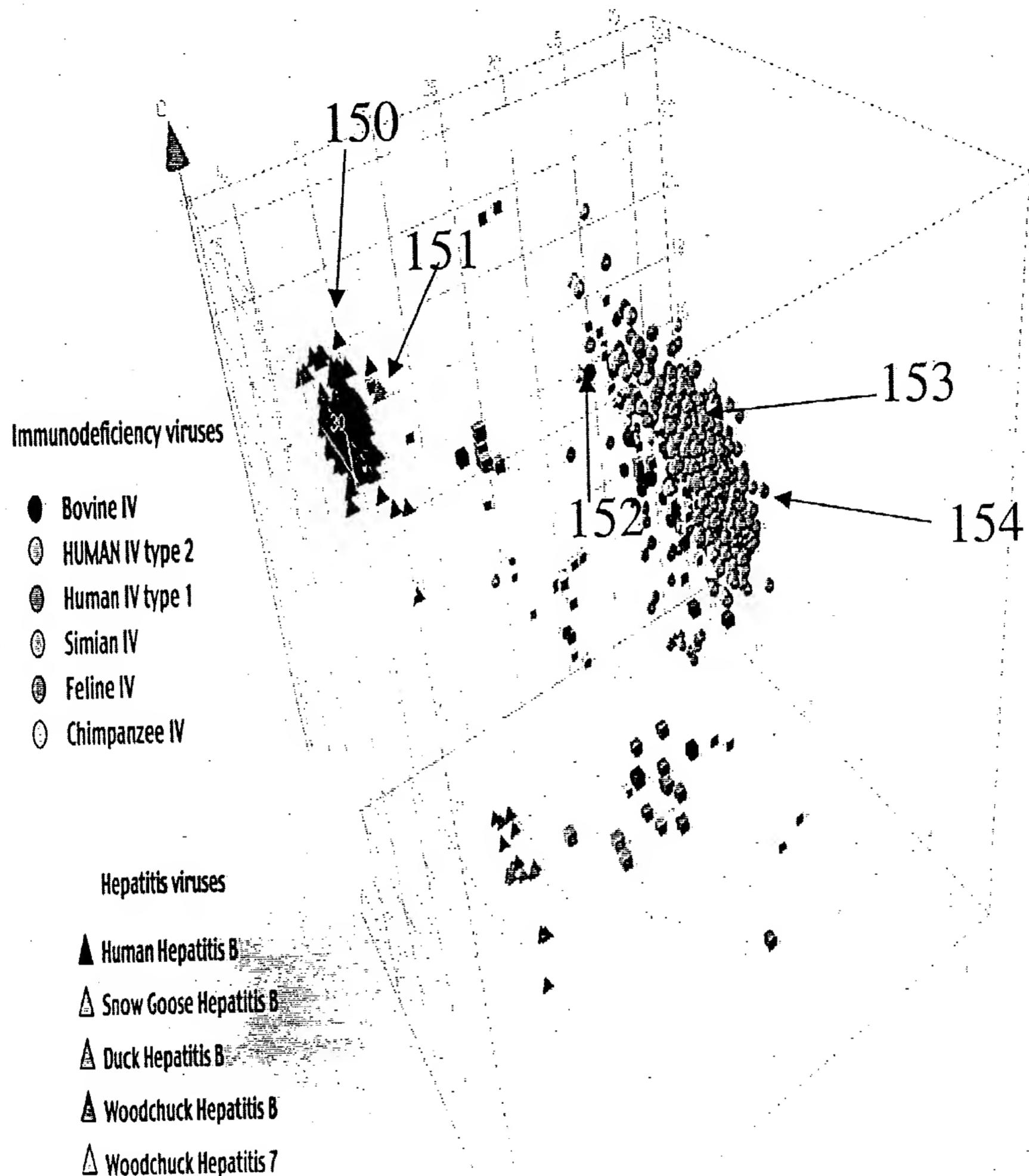
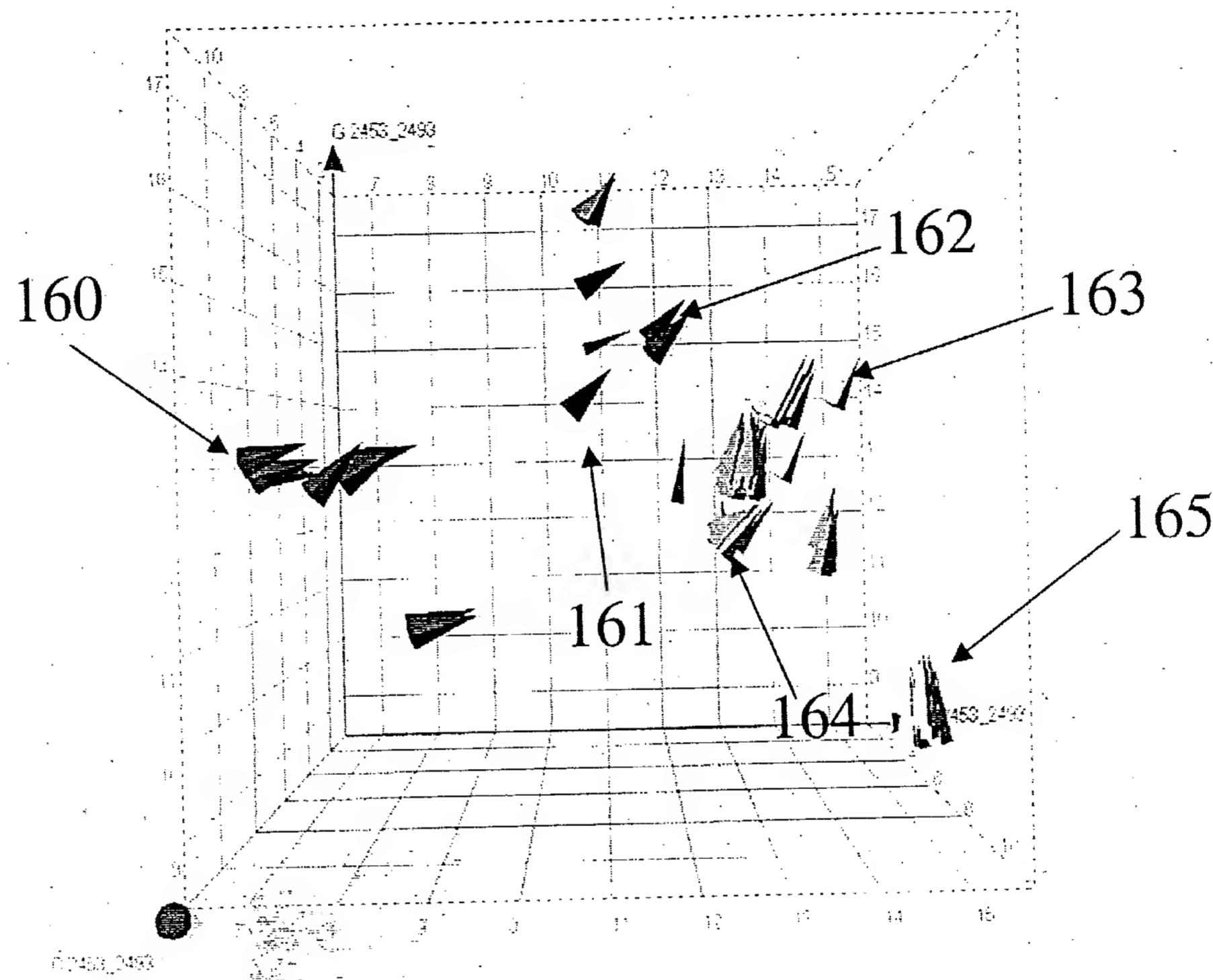


Figure 16

0 9 8 7 6 5 4 3 2 1 0



Flavi RdRp 2453-2493

- |                     |                                    |                                 |
|---------------------|------------------------------------|---------------------------------|
| ■ Dengue virus type | ■ Japanese encephalitis virus      | ■ Tick-borne encephalitis virus |
| ■ Dengue virus type | ■ Kunjin virus                     | ■ West Nile virus               |
| ■ Dengue virus type | □ Murray valley encephalitis virus | □ Yellow fever virus            |

Figure 17

